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comprising substantially intact products and smaller, partial pieces of the intact products, and the conveyor means having a discharge end; and an inclined chute extending underneath the conveyor means with an upper end of the chute being disposed downstream of and horizontally spaced from the discharge end by a distance forming an opening between the discharge end and the upper end of the chute, the size of the opening being variable and selected so as to allow the passage of the smaller, partial pieces down the inclined chute in a direction opposite to the downstream direction of the product stream and to allow the passage of the substantially intact product over the upper end of the chute in the downstream direction; wherein the upper end of the discharge chute comprises a convex curved surface for receiving product discharged from the downstream end of the conveyor means and for preventing damage to the substantially intact products as they pass thereover.

2. An apparatus as claimed in claim 1 wherein said curved convex surface is tangential with a horizontal plane.

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3. An apparatus as claimed in claim 2 wherein the curved convex surface of the upper end of the chute is tangential with a horizontal plane of the feed surface of the conveyor.

4. An apparatus as claimed in claim 1 wherein the chute is inclined at an angle such that the smaller, partial pieces slide down the chute under the force of gravity.

5. An apparatus as claimed in claim 1 further comprising a receptacle disposed at a lower end of the chute to receive the smaller partial pieces.

6. An apparatus as claimed in claim 1 wherein the particle stream is snack food chip stream and the smaller, partial pieces comprise crumbs of broken chips.

7. An apparatus as claimed in claim 1 wherein the conveyor is a vibratory conveyor.

8. An apparatus as claimed in claim 7 wherein said chute is attached to said vibratory conveyor.

9. An apparatus as claimed in claim 2 wherein the upper end of the chute has a radius of curvature in the range from one-fourth to one inch (0.63 to 2.54 centimeters).

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